

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/546,139
Source: P5/10
Date Processed by STIC: 8/30/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/546,139

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
 Wrapped Aminos was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will
 prevent "wrapping."

- 2 Invalid Line Length The rules require that a line **not exceed** 72 characters in length. This includes white spaces.

- 3 Misaligned Amino The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers;
 Numbering use **space characters**, instead.

- 4 ✓ Non-ASCII The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please**
 ensure your subsequent submission is saved in ASCII text.

- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. **Per Sequence Rules,**
 each n or Xaa can only represent a single residue. Please present the **maximum** number of each
 residue having variable length and indicate in the <220>-<223> section that some may be missing.

- 6 PatentIn 2.0 A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
 "bug" sequences(s) . Normally, PatentIn would automatically generate this section from the
 previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
 the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for**
 Artificial or Unknown sequences.

- 7 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for **each** skipped sequence:
 (OLD RULES) (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.

- 8 Skipped Sequences Sequence(s) missing. If **intentional**, please insert the following lines for **each** skipped sequence.
 (NEW RULES) <210> sequence id number
 <400> sequence id number
 000

- 9 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
 (NEW RULES) Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
 In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.

- 10 Invalid <213> Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or
 Response scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or
 is Artificial Sequence

- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or
 "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

- 12 PatentIn 2.0 Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
 "bug" resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
 listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

- 13 Misuse of n/Xaa "n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid



PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/546,139

DATE: 08/30/2005

TIME: 14:03:41

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\08302005\J546139.raw

*see item 4 on Euro
summary
sheet*

3 <110> APPLICANT: Metabolic Explorer
5 <120> TITLE OF INVENTION: Procédé de préparation de microorganismes évolués permettant
la création

6 ou la modification de voies métaboliques

8 <130> FILE REFERENCE: D20701/ 345773

C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/546,139

C--> 10 <141> CURRENT FILING DATE: 2005-08-17

10 <150> PRIOR APPLICATION NUMBER: FR 0301924

11 <151> PRIOR FILING DATE: 2003-02-18

13 <150> PRIOR APPLICATION NUMBER: FR 0305768

14 <151> PRIOR FILING DATE: 2003-05-14

16 <150> PRIOR APPLICATION NUMBER: FR 0305769

17 <151> PRIOR FILING DATE: 2003-05-14

19 <150> PRIOR APPLICATION NUMBER: FR 0313054

20 <151> PRIOR FILING DATE: 2003-11-06

22 <160> NUMBER OF SEQ ID NOS: 42

24 <170> SOFTWARE: PatentIn version 3.1

26 <210> SEQ ID NO: 1

27 <211> LENGTH: 100

28 <212> TYPE: DNA

29 <213> ORGANISM: Artificial Sequence

31 <220> FEATURE:

32 <223> OTHER INFORMATION: DmetER

34 <400> SEQUENCE: 1

35 taccctccgac gcaagttctg cgccgcctgc accatgttcg ccagtgcgc gcgggtttct

37 ggccagccgc gcgttttcag catatgaata tctccttag

40 <210> SEQ ID NO: 2

41 <211> LENGTH: 100

42 <212> TYPE: DNA

43 <213> ORGANISM: Artificial Sequence

45 <220> FEATURE:

46 <223> OTHER INFORMATION: DmetEF

48 <400> SEQUENCE: 2

49 tgacaatatt gaatcacacc ctgcgtttcc ctgcgttg cctgcgtgc gagctgaaaa

51 aagcgcaaga aagttattgg tgtaggctgg agctgcttcg

54 <210> SEQ ID NO: 3

55 <211> LENGTH: 30

56 <212> TYPE: DNA

57 <213> ORGANISM: Artificial Sequence

59 <220> FEATURE:

60 <223> OTHER INFORMATION: MetER

62 <400> SEQUENCE: 3

63 ggtttaagca gtatggtggg aagaagtcgc

66 <210> SEQ ID NO: 4

*use English for a U.S.
application*

**Does Not Comply
Corrected Diskette Needed**

pp 1-6

*insufficient explanation. Give source of
genetic material.*

*60 (See
100 item 11 on*

*Euro
summary
sheet)*

same error

same

RAW SEQUENCE LISTING

DATE: 08/30/2005

PATENT APPLICATION: US/10/546,139

TIME: 14:03:41

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\08302005\J546139.raw

```

67 <211> LENGTH: 30
68 <212> TYPE: DNA
69 <213> ORGANISM: Artificial Sequence
71 <220> FEATURE:
72 <223> OTHER INFORMATION: MetEF
74 <400> SEQUENCE: 4
75 cccgggggatg aataaacttg ccgccttccc 30
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 1161
80 <212> TYPE: DNA
81 <213> ORGANISM: Escherichia coli
83 <400> SEQUENCE: 5
84 atgacgcgta aacaggccac catcgcagtg cgtagcgggt taaatgacga cgaacagtat 60
86 ggttgcgttg tcccaccgat ccatctttcc agcacctata actttaccgg atttaatgaa 120
88 ccgcgcgcgc atgattactc gcgtcgcggc aacccaacgc gcgatgtggt tcagcgtgcg 180
90 ctggcagaac tggaagggtg tgctggtgca gtacttacta ataccggcat gtccgcgatt 240
92 cacctggtaa cgaccgtctt ttgaaacct ggcgatctgc tggttgcgcc gcacgactgc 300
94 tacggcggta gctatcgctt gttcgacagt ctggcgaaac gcggttgcta tcgcgtgttg 360
96 tttgttgatc aaggcgatga acaggcatta cgggcagcgc tggcagaaaa acccaaactg 420
98 gtactggtag aaagcccaag taatccattg ttacgcgtcg tggatattgc gaaaatctgc 480
100 catctggcaa gggaagtcgg ggcggtgagc gtggtggata acaccttctt aagcccggca 540
102 ttacaaaatc cgctggcatt aggtgccgat ctggtgttg attcatgcac gaaatatctg 600
104 aacggtcact cagacgtagt ggccggcggt gtgattgcta aagaccgga cgttgtcact 660
106 gaactggcct ggtgggcaaa caatattggc gtgacgggag gcgcgtttga cagctatctg 720
108 ctgctacgtg ggttgcgaac gctggtgccg cgtatggagc tggcgagcgc caacgcgcag 780
110 gcgattgtga aatacctgca aaccagccg ttggtgaaaa aactgtatca cccgtcgttg 840
112 ccggaaaatc aggggcatga aattgccgcg cgccagcaaa aaggctttgg cgcaatgttg 900
114 agttttgaac tggatggcga tgagcagacg ctgcgtcggt tcctggggcg gctgtcggtg 960
116 ttacgctgg cggaatcatt agggggagtg gaaagtttaa tctctcacgc cgcaaccatg 1020
118 acacatgcag gcatggcacc agaagcgcg gtgcccgcg ggatctccga gacgctgctg 1080
120 cgtatctcca ccggtattga agatggcgaa gatttaattg ccgacctgga aaatggcttc 1140
122 cgggctgcaa acaaggggta a
125 <210> SEQ ID NO: 6
126 <211> LENGTH: 10
127 <212> TYPE: PRT
128 <213> ORGANISM: Escherichia coli
130 <400> SEQUENCE: 6
132 Met Glu Thr Thr His Arg Ala Arg Gly Leu
133 1 5 10
136 <210> SEQ ID NO: 7
137 <211> LENGTH: 1161
138 <212> TYPE: DNA
139 <213> ORGANISM: Escherichia coli
141 <400> SEQUENCE: 7
142 atgacgcgta aacaggccac catcgcagtg cgtagcgggt taaatgacga cgaacagtat 60
144 ggttgcgttg tcccaccgat ccatctttcc agcacctata actttaccgg atttaatgaa 120
146 ccgcgcgcgc atgattactc gcgtcgcggc aacccaacgc gcgatgtggt tcagcgtgcg 180
148 ctggcagaac tggaagggtg tgctggtgca gtacttacta ataccggcat gtccgcgatt 240
150 cacctggtaa cgaccgtctt ttgaaacct ggcgatctgc tggttgcgcc gcacgactgc 300

```

RAW SEQUENCE LISTING

DATE: 08/30/2005

PATENT APPLICATION: US/10/546,139

TIME: 14:03:41

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\08302005\J546139.raw

```

152 tacggcggta gctatcgctt gttagcacagt ctggcgaaac gcggttgcta tcgcgtgttg 360
154 ttigtgtgatc aaggcgatga acaggcatta cgggcagcgc tggcagaaaa acccaaactg 420
156 gtactggtag aaagcccaag taatccattg ttacgcgtcg tggatattgc gaaaatctgc 480
158 catctggcaa gggaagtcgg ggccggtgagc gtggtggata acaccttctt aagcccggca 540
160 ttacaaaatc cgctggcatt aggtgcccgt ctggtgttg attcatgcac gaaatatctg 600
162 aacggtcact cagacgtagt ggccggcggt gtgattgcta aagaccgga cgttgtcact 660
164 gaactggcct ggtgggcaaa caatattggc gtgacgggcg gcgcgtttga cagctatctg 720
166 ctgctacgtg ggttgccgaac gctggtgccg cgtatggagc tggcgagcgc caacgcgcag 780
168 gcgattgtga aatacctgca aaccagccg ttggtgaaaa aactgtatca cccgtcgttg 840
170 ccggaaaatc aggggcatga aattgccgcg cgccagcaaa aaggctttgg cgcaatgttg 900
172 agttttgaac tggatggcga tgagcagacg ctgcgtcggt tccctgggcg gctgtcgttg 960
174 tttagcgtgg cggcatcatt agggggagtg gaaagtttaa tctctcacgc cgcaaccatg 1020
176 acacatgcag gcatggcacc agaagcgcgt gctgccgccg ggatctccga gacgctgctg 1080
178 cgtatctcca ccggtattga agatggcgaa gatttaattg ccgacctgga aaatggcttc 1140
180 cgggctgcaa acaaggggta a
183 <210> SEQ ID NO: 8 1161
184 <211> LENGTH: 5
185 <212> TYPE: PRT
186 <213> ORGANISM: Escherichia coli
188 <400> SEQUENCE: 8
190 Met Glu Thr Thr His
191 1 5
194 <210> SEQ ID NO: 9
195 <211> LENGTH: 30
196 <212> TYPE: DNA
197 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: MetJR
202 <400> SEQUENCE: 9
203 ggtacagaaa ccagcaggct gaggatcagc 30
206 <210> SEQ ID NO: 10
207 <211> LENGTH: 100
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: DmetJBF
214 <400> SEQUENCE: 10
215 tatgcagctg acgacctttc gcccctgcct gcgcaatcac actcattttt accccttggt 60
217 tgcagcccg aagccatttt caggcaccag agtaaactt 100
220 <210> SEQ ID NO: 11
221 <211> LENGTH: 30
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:
226 <223> OTHER INFORMATION: MetCR
228 <400> SEQUENCE: 11
229 cgtccgggac gccttgatcc cggacgcaac 30
232 <210> SEQ ID NO: 12
233 <211> LENGTH: 32

```

RAW SEQUENCE LISTING

DATE: 08/30/2005

PATENT APPLICATION: US/10/546,139

TIME: 14:03:41

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\08302005\J546139.raw

```

234 <212> TYPE: DNA
235 <213> ORGANISM: Artificial Sequence
237 <220> FEATURE:
238 <223> OTHER INFORMATION: MetCF
240 <400> SEQUENCE: 12
241 gcgtttacgc agtaaaaaag tcaccagcac gc 32
244 <210> SEQ ID NO: 13
245 <211> LENGTH: 100
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: DmetCR
252 <400> SEQUENCE: 13
253 ccggcggtcca gatcggaat cagatcgctg acatcttcca gaccaatatg caggcgaatc 60
255 aaggtcccg c taaaatcgat catatgaata tcttccttag 100
258 <210> SEQ ID NO: 14
259 <211> LENGTH: 100
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: DmetCF
266 <400> SEQUENCE: 14
267 cggacaaaaa gcttgatact caactggtga atgcaggacg cagcaaaaaa tacactctcg 60
269 gcgcggtaaa tagcgtgatt tgtaggctgg agctgcttcg 100
272 <210> SEQ ID NO: 15
273 <211> LENGTH: 100
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: DcysKR
280 <400> SEQUENCE: 15
281 tgttgcaatt ctttctcagt gaagagatcg gcaaacaatg cgggtgcttaa ataacgctca 60
283 cccgatgatg gtagaataac catatgaata tcttccttag 100
286 <210> SEQ ID NO: 16
287 <211> LENGTH: 100
288 <212> TYPE: DNA
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: DcysKF
294 <400> SEQUENCE: 16
295 agtaagattt ttgaagataa ctcgctgact atcggtcaca cgccgctggt tcgcctgaat 60
297 cgcacggta acggacgcat tgtaggctgg agctgcttcg 100
300 <210> SEQ ID NO: 17
301 <211> LENGTH: 100
302 <212> TYPE: DNA
303 <213> ORGANISM: Artificial Sequence
305 <220> FEATURE:
306 <223> OTHER INFORMATION: DcysMR
308 <400> SEQUENCE: 17

```

RAW SEQUENCE LISTING

DATE: 08/30/2005

PATENT APPLICATION: US/10/546,139

TIME: 14:03:41

Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\08302005\J546139.raw

```

309 cccgccccct ggctaaaatg ctcttcccca aacaccccgg tagaaaggta gcgatcgcca      60
311 cgatcgcaga tgatcgccac catatgaata tcctccttag      100
314 <210> SEQ ID NO: 18
315 <211> LENGTH: 100
316 <212> TYPE: DNA
317 <213> ORGANISM: Artificial Sequence
319 <220> FEATURE:
320 <223> OTHER INFORMATION: DcysMF
322 <400> SEQUENCE: 18
323 agtacattag aacaacaat aggcaatag cctctggtga agttgcagcg aatggggccg      60
325 gataacggca gtgaagtgtg ttaggctgg agctgcttcg      100
328 <210> SEQ ID NO: 19
329 <211> LENGTH: 30
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial Sequence
333 <220> FEATURE:
334 <223> OTHER INFORMATION: cysKR
336 <400> SEQUENCE: 19
337 tttttaacag acgcgacgca cgaagagcgc      30
340 <210> SEQ ID NO: 20
341 <211> LENGTH: 30
342 <212> TYPE: DNA
343 <213> ORGANISM: Artificial Sequence
345 <220> FEATURE:
346 <223> OTHER INFORMATION: cysKR
348 <400> SEQUENCE: 20
349 ggcgcgacgg cgatgtgggt cgattgctat      30
352 <210> SEQ ID NO: 21
353 <211> LENGTH: 30
354 <212> TYPE: DNA
355 <213> ORGANISM: Artificial Sequence
357 <220> FEATURE:
358 <223> OTHER INFORMATION: cysMR
360 <400> SEQUENCE: 21
361 ggggtgacgg tcaggactca ccaatacttc      30
364 <210> SEQ ID NO: 22
365 <211> LENGTH: 30
366 <212> TYPE: DNA
367 <213> ORGANISM: Artificial Sequence
369 <220> FEATURE:
370 <223> OTHER INFORMATION: cysMF
372 <400> SEQUENCE: 22
373 gcgcgcatcg ctggccgctg ggctacacac      30
376 <210> SEQ ID NO: 23
377 <211> LENGTH: 74
378 <212> TYPE: DNA
379 <213> ORGANISM: Artificial Sequence
381 <220> FEATURE:
382 <223> OTHER INFORMATION: MetYR

```

global error

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/546,139

DATE: 08/30/2005
TIME: 14:03:42

Input Set : A:\PTO.SR.txt
Output Set: N:\CRF4\08302005\J546139.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5

VERIFICATION SUMMARY

PATENT APPLICATION: **US/10/546,139**

DATE: 08/30/2005

TIME: 14:03:42

Input Set : **A:\PTO.SR.txt**

Output Set: **N:\CRF4\08302005\J546139.raw**

L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date